Release notes for ENDF/B Development n-035_Br_079 evaluation

April 26, 2017

- **checkr** Warnings:

  1. A previous error halted parsing of the current section
     MAT=3525, MF= 1, MT=451 (1): Parsing stopped

     ```
     ERROR(S) FOUND IN MAT=3525, MF= 1, MT=451
         SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER     285 TO     377
     ```

- **checkr** Errors:

  1. A variable is outside the allowed ENDF range
     MAT=3525, MF= 1, MT=451 (0): Variable range

     ```
     ERROR(S) FOUND IN MAT=3525, MF= 1, MT=451
         MOD =    1 OUT OF RANGE    0 -    0          RECORD NUMBER    285
     ```

  2. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=3525, MF= 2, MT=151 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=3525, MF= 2, MT=151
         SECTION  2/151 NOT IN DIRECTORY               RECORD NUMBER    379
     ```

  3. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=3525, MF= 3, MT= 1 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=3525, MF= 3, MT=  1
         SECTION  3/  1 NOT IN DIRECTORY              RECORD NUMBER    920
     ```

  4. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=3525, MF= 3, MT= 2 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=3525, MF= 3, MT=  2
         SECTION  3/  2 NOT IN DIRECTORY              RECORD NUMBER    953
     ```

  5. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=3525, MF= 3, MT= 4 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=3525, MF= 3, MT=  4
         SECTION  3/  4 NOT IN DIRECTORY              RECORD NUMBER    986
     ```

  6. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=3525, MF= 3, MT= 16 (0): Directory (b)

     ```
     ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 16
         SECTION  3/ 16 NOT IN DIRECTORY              RECORD NUMBER    1009
     ```

  7. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=3525, MF= 3, MT= 17 (0): Directory (b)

1

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 17
     SECTION  3/ 17 NOT IN DIRECTORY                RECORD NUMBER    1018
```

8. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=3525, MF= 3, MT= 22 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 22
     SECTION  3/ 22 NOT IN DIRECTORY                RECORD NUMBER    1023
```

9. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=3525, MF= 3, MT= 28 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 28
     SECTION  3/ 28 NOT IN DIRECTORY                RECORD NUMBER    1036
```

10. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 32 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 32
     SECTION  3/ 32 NOT IN DIRECTORY                RECORD NUMBER    1048
```

11. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 33 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 33
     SECTION  3/ 33 NOT IN DIRECTORY                RECORD NUMBER    1055
```

12. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 51 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 51
     SECTION  3/ 51 NOT IN DIRECTORY                RECORD NUMBER    1062
```

13. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 52 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 52
     SECTION  3/ 52 NOT IN DIRECTORY                RECORD NUMBER    1085
```

14. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 53 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 53
     SECTION  3/ 53 NOT IN DIRECTORY                RECORD NUMBER    1107
```

15. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 54 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 54
          SECTION  3/ 54 NOT IN DIRECTORY                    RECORD NUMBER     1129
```

16. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 55 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 55
          SECTION  3/ 55 NOT IN DIRECTORY                    RECORD NUMBER     1150
```

17. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 56 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 56
          SECTION  3/ 56 NOT IN DIRECTORY                    RECORD NUMBER     1171
```

18. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 57 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 57
          SECTION  3/ 57 NOT IN DIRECTORY                    RECORD NUMBER     1191
```

19. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 58 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 58
          SECTION  3/ 58 NOT IN DIRECTORY                    RECORD NUMBER     1211
```

20. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 59 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 59
          SECTION  3/ 59 NOT IN DIRECTORY                    RECORD NUMBER     1230
```

21. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 60 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 60
          SECTION  3/ 60 NOT IN DIRECTORY                    RECORD NUMBER     1249
```

22. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 61 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 61
          SECTION  3/ 61 NOT IN DIRECTORY                    RECORD NUMBER     1267
```

23. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 62 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 62
    SECTION  3/ 62 NOT IN DIRECTORY                RECORD NUMBER    1285
```

24. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 63 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 63
    SECTION  3/ 63 NOT IN DIRECTORY                RECORD NUMBER    1302
```

25. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 64 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 64
    SECTION  3/ 64 NOT IN DIRECTORY                RECORD NUMBER    1319
```

26. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 65 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 65
    SECTION  3/ 65 NOT IN DIRECTORY                RECORD NUMBER    1335
```

27. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 66 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 66
    SECTION  3/ 66 NOT IN DIRECTORY                RECORD NUMBER    1351
```

28. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 67 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 67
    SECTION  3/ 67 NOT IN DIRECTORY                RECORD NUMBER    1366
```

29. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 68 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 68
    SECTION  3/ 68 NOT IN DIRECTORY                RECORD NUMBER    1381
```

30. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 69 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 69
    SECTION  3/ 69 NOT IN DIRECTORY                RECORD NUMBER    1396
```

31. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 70 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 70
               SECTION  3/ 70 NOT IN DIRECTORY                    RECORD NUMBER    1410
```

32. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 71 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 71
               SECTION  3/ 71 NOT IN DIRECTORY                    RECORD NUMBER    1424
```

33. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 72 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 72
               SECTION  3/ 72 NOT IN DIRECTORY                    RECORD NUMBER    1438
```

34. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 73 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 73
               SECTION  3/ 73 NOT IN DIRECTORY                    RECORD NUMBER    1451
```

35. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 74 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 74
               SECTION  3/ 74 NOT IN DIRECTORY                    RECORD NUMBER    1464
```

36. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 75 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 75
               SECTION  3/ 75 NOT IN DIRECTORY                    RECORD NUMBER    1476
```

37. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 76 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 76
               SECTION  3/ 76 NOT IN DIRECTORY                    RECORD NUMBER    1488
```

38. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 77 (0): Directory (b)

```
            ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 77
               SECTION  3/ 77 NOT IN DIRECTORY                    RECORD NUMBER    1499
```

39. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT= 78 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 78
            SECTION  3/ 78 NOT IN DIRECTORY                   RECORD NUMBER    1510
```

40. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3525, MF= 3, MT= 79 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 79
            SECTION  3/ 79 NOT IN DIRECTORY                   RECORD NUMBER    1521
```

41. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3525, MF= 3, MT= 91 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=3525, MF= 3, MT= 91
            SECTION  3/ 91 NOT IN DIRECTORY                   RECORD NUMBER    1531
```

42. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3525, MF= 3, MT=102 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=3525, MF= 3, MT=102
            SECTION  3/102 NOT IN DIRECTORY                   RECORD NUMBER    1541
```

43. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3525, MF= 3, MT=103 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=3525, MF= 3, MT=103
            SECTION  3/103 NOT IN DIRECTORY                   RECORD NUMBER    1568
```

44. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3525, MF= 3, MT=104 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=3525, MF= 3, MT=104
            SECTION  3/104 NOT IN DIRECTORY                   RECORD NUMBER    1584
```

45. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3525, MF= 3, MT=105 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=3525, MF= 3, MT=105
            SECTION  3/105 NOT IN DIRECTORY                   RECORD NUMBER    1597
```

46. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3525, MF= 3, MT=106 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=3525, MF= 3, MT=106
            SECTION  3/106 NOT IN DIRECTORY                   RECORD NUMBER    1608
```

47. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3525, MF= 3, MT=107 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=3525, MF= 3, MT=107
         SECTION  3/107 NOT IN DIRECTORY                    RECORD NUMBER    1618
```

48. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 3, MT=111 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=3525, MF= 3, MT=111
         SECTION  3/111 NOT IN DIRECTORY                    RECORD NUMBER    1634
```

49. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 2 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=3525, MF= 4, MT=  2
         SECTION  4/  2 NOT IN DIRECTORY                    RECORD NUMBER    1645
```

50. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 16 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 16
         SECTION  4/ 16 NOT IN DIRECTORY                    RECORD NUMBER    1863
```

51. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 17 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 17
         SECTION  4/ 17 NOT IN DIRECTORY                    RECORD NUMBER    1874
```

52. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 22 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 22
         SECTION  4/ 22 NOT IN DIRECTORY                    RECORD NUMBER    1885
```

53. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 28 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 28
         SECTION  4/ 28 NOT IN DIRECTORY                    RECORD NUMBER    1896
```

54. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 32 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 32
         SECTION  4/ 32 NOT IN DIRECTORY                    RECORD NUMBER    1907
```

55. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 33 (0): Directory (b)

7

```
    ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 33
       SECTION  4/ 33 NOT IN DIRECTORY                RECORD NUMBER    1918
```

56. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 51 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 51
       SECTION  4/ 51 NOT IN DIRECTORY                RECORD NUMBER    1929
```

57. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 52 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 52
       SECTION  4/ 52 NOT IN DIRECTORY                RECORD NUMBER    1954
```

58. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 53 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 53
       SECTION  4/ 53 NOT IN DIRECTORY                RECORD NUMBER    1980
```

59. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 54 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 54
       SECTION  4/ 54 NOT IN DIRECTORY                RECORD NUMBER    2006
```

60. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 55 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 55
       SECTION  4/ 55 NOT IN DIRECTORY                RECORD NUMBER    2031
```

61. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 56 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 56
       SECTION  4/ 56 NOT IN DIRECTORY                RECORD NUMBER    2056
```

62. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 57 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 57
       SECTION  4/ 57 NOT IN DIRECTORY                RECORD NUMBER    2081
```

63. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 58 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 58
           SECTION  4/ 58 NOT IN DIRECTORY                RECORD NUMBER    2106
```

64. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=3525$, $MF= 4$, $MT= 59$ (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 59
           SECTION  4/ 59 NOT IN DIRECTORY                RECORD NUMBER    2131
```

65. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=3525$, $MF= 4$, $MT= 60$ (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 60
           SECTION  4/ 60 NOT IN DIRECTORY                RECORD NUMBER    2156
```

66. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=3525$, $MF= 4$, $MT= 61$ (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 61
           SECTION  4/ 61 NOT IN DIRECTORY                RECORD NUMBER    2181
```

67. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=3525$, $MF= 4$, $MT= 62$ (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 62
           SECTION  4/ 62 NOT IN DIRECTORY                RECORD NUMBER    2206
```

68. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=3525$, $MF= 4$, $MT= 63$ (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 63
           SECTION  4/ 63 NOT IN DIRECTORY                RECORD NUMBER    2231
```

69. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=3525$, $MF= 4$, $MT= 64$ (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 64
           SECTION  4/ 64 NOT IN DIRECTORY                RECORD NUMBER    2256
```

70. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=3525$, $MF= 4$, $MT= 65$ (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 65
           SECTION  4/ 65 NOT IN DIRECTORY                RECORD NUMBER    2279
```

71. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=3525$, $MF= 4$, $MT= 66$ (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 66
           SECTION  4/ 66 NOT IN DIRECTORY                  RECORD NUMBER    2302
```

72. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 67 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 67
           SECTION  4/ 67 NOT IN DIRECTORY                  RECORD NUMBER    2325
```

73. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 68 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 68
           SECTION  4/ 68 NOT IN DIRECTORY                  RECORD NUMBER    2348
```

74. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 69 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 69
           SECTION  4/ 69 NOT IN DIRECTORY                  RECORD NUMBER    2371
```

75. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 70 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 70
           SECTION  4/ 70 NOT IN DIRECTORY                  RECORD NUMBER    2394
```

76. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 71 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 71
           SECTION  4/ 71 NOT IN DIRECTORY                  RECORD NUMBER    2417
```

77. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 72 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 72
           SECTION  4/ 72 NOT IN DIRECTORY                  RECORD NUMBER    2440
```

78. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 73 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 73
           SECTION  4/ 73 NOT IN DIRECTORY                  RECORD NUMBER    2463
```

79. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 74 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 74
          SECTION  4/ 74 NOT IN DIRECTORY                  RECORD NUMBER    2486
```

80. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 75 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 75
          SECTION  4/ 75 NOT IN DIRECTORY                  RECORD NUMBER    2509
```

81. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 76 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 76
          SECTION  4/ 76 NOT IN DIRECTORY                  RECORD NUMBER    2532
```

82. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 77 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 77
          SECTION  4/ 77 NOT IN DIRECTORY                  RECORD NUMBER    2555
```

83. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 78 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 78
          SECTION  4/ 78 NOT IN DIRECTORY                  RECORD NUMBER    2578
```

84. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 79 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 79
          SECTION  4/ 79 NOT IN DIRECTORY                  RECORD NUMBER    2601
```

85. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 4, MT= 91 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 4, MT= 91
          SECTION  4/ 91 NOT IN DIRECTORY                  RECORD NUMBER    2624
```

86. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 5, MT= 16 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 5, MT= 16
          SECTION  5/ 16 NOT IN DIRECTORY                  RECORD NUMBER    2648
```

87. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 5, MT= 17 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 5, MT= 17
           SECTION  5/ 17 NOT IN DIRECTORY               RECORD NUMBER    2694
```

88. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 5, MT= 22 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 5, MT= 22
           SECTION  5/ 22 NOT IN DIRECTORY               RECORD NUMBER    2708
```

89. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 5, MT= 28 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 5, MT= 28
           SECTION  5/ 28 NOT IN DIRECTORY               RECORD NUMBER    2857
```

90. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 5, MT= 32 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 5, MT= 32
           SECTION  5/ 32 NOT IN DIRECTORY               RECORD NUMBER    2973
```

91. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 5, MT= 33 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 5, MT= 33
           SECTION  5/ 33 NOT IN DIRECTORY               RECORD NUMBER    3013
```

92. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=3525, MF= 5, MT= 91 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=3525, MF= 5, MT= 91
           SECTION  5/ 91 NOT IN DIRECTORY               RECORD NUMBER    3042
```

- `psyche` Warnings:

    1. Gamma width not in agreement with PSYCHE's expectations
       FILE 2 / SECTION 151 / ISOTOPE MASS = 79. L = 0 / AT RESONANCE ENERGY 5.02800E+03 EV. THE GAMMA WIDTH 3.54700E-02 DEVIATES TOO MUCH FROM THE AVERAGE 3.10726E-01 (0): Gamma width

```
        FILE  2
           SECTION 151
                ISOTOPE MASS =  79. L =  0
                            AT RESONANCE ENERGY  5.02800E+03 EV. THE GAMMA WIDTH  3.54700E-02 DEVIATES TOO MUCH FROM THE AV
```

    2. Strength function in URR not in agreement with PSYCHE's expectations
       FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION IS 5.80000E-05 / STRENGTH FUNCTION 5.80000E-05 / LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
         ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.80000E-05
                        STRENGTH FUNCTION 5.80000E-05
                                      LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
   ... [1 more lines]
```

3. Strength function in URR not in agreement with PSYCHE's expectations
   *FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
   IS 5.80000E-05 / STRENGTH FUNCTION 5.79999E-05 / LIES OUTSIDE LIMITS
   1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

```
FILE  2
   SECTION 151
         ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.80000E-05
                        STRENGTH FUNCTION 5.79999E-05
                                      LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
   ... [1 more lines]
```

4. Strength function in URR not in agreement with PSYCHE's expectations
   *FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
   IS 5.80000E-05 / STRENGTH FUNCTION 5.80007E-05 / LIES OUTSIDE LIMITS
   1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

```
FILE  2
   SECTION 151
         ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.80000E-05
                        STRENGTH FUNCTION 5.80007E-05
                                      LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

5. Strength function in URR not in agreement with PSYCHE's expectations
   *FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
   IS 5.80000E-05 / STRENGTH FUNCTION 5.79995E-05 / LIES OUTSIDE LIMITS
   1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

```
FILE  2
   SECTION 151
         ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.80000E-05
                        STRENGTH FUNCTION 5.79995E-05
                                      LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

6. Strength function in URR not in agreement with PSYCHE's expectations
   *FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
   IS 5.80000E-05 / STRENGTH FUNCTION 5.79998E-05 / LIES OUTSIDE LIMITS
   1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

```
FILE  2
   SECTION 151
         ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.80000E-05
                        STRENGTH FUNCTION 5.79998E-05
                                      LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
   ... [2 more lines]
```

7. Strength function in URR not in agreement with PSYCHE's expectations
   *FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
   IS 5.80000E-05 / STRENGTH FUNCTION 5.80002E-05 / LIES OUTSIDE LIMITS*

```
                  1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.


          FILE  2
             SECTION 151
                ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.80000E-05
                            STRENGTH FUNCTION 5.80002E-05
                                        LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

8. Strength function in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
   IS 5.80000E-05 / STRENGTH FUNCTION 5.80004E-05 / LIES OUTSIDE LIMITS
   1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
          FILE  2
             SECTION 151
                ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.80000E-05
                            STRENGTH FUNCTION 5.80004E-05
                                        LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

9. Strength function in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
   IS 5.80000E-05 / STRENGTH FUNCTION 5.79991E-05 / LIES OUTSIDE LIMITS
   1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
          FILE  2
             SECTION 151
                ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.80000E-05
                            STRENGTH FUNCTION 5.79991E-05
                                        LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

10. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
    IS 5.80000E-05 / STRENGTH FUNCTION 5.79993E-05 / LIES OUTSIDE LIMITS
    1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
          FILE  2
             SECTION 151
                ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.80000E-05
                            STRENGTH FUNCTION 5.79993E-05
                                        LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

11. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
    IS 5.80000E-05 / STRENGTH FUNCTION 5.80009E-05 / LIES OUTSIDE LIMITS
    1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
          FILE  2
             SECTION 151
                ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.80000E-05
                            STRENGTH FUNCTION 5.80009E-05
                                        LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

12. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
    IS 5.80000E-05 / STRENGTH FUNCTION 5.79994E-05 / LIES OUTSIDE LIMITS
    1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS   5.80000E-05
                         STRENGTH FUNCTION 5.79994E-05
                                         LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

13. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
    IS 5.79999E-05 / STRENGTH FUNCTION 5.79999E-05 / LIES OUTSIDE LIMITS
    1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS   5.79999E-05
                         STRENGTH FUNCTION 5.79999E-05
                                         LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

14. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
    IS 5.79999E-05 / STRENGTH FUNCTION 5.80012E-05 / LIES OUTSIDE LIMITS
    1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS   5.79999E-05
                         STRENGTH FUNCTION 5.80012E-05
                                         LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

15. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
    IS 5.79999E-05 / STRENGTH FUNCTION 5.79993E-05 / LIES OUTSIDE LIMITS
    1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS   5.79999E-05
                         STRENGTH FUNCTION 5.79993E-05
                                         LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
... [1 more lines]
```

16. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
    IS 5.79999E-05 / STRENGTH FUNCTION 5.80004E-05 / LIES OUTSIDE LIMITS
    1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS   5.79999E-05
                         STRENGTH FUNCTION 5.80004E-05
                                         LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
... [1 more lines]
```

17. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
    IS 5.79999E-05 / STRENGTH FUNCTION 5.80009E-05 / LIES OUTSIDE LIMITS
    1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
FILE   2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS   5.79999E-05
                      STRENGTH FUNCTION 5.80009E-05
                                      LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
... [1 more lines]
```

18. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
IS 5.79999E-05 / STRENGTH FUNCTION 5.79995E-05 / LIES OUTSIDE LIMITS
1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

```
FILE   2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS   5.79999E-05
                      STRENGTH FUNCTION 5.79995E-05
                                      LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
... [1 more lines]
```

19. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
IS 5.79999E-05 / STRENGTH FUNCTION 5.79997E-05 / LIES OUTSIDE LIMITS
1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

```
FILE   2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS   5.79999E-05
                      STRENGTH FUNCTION 5.79997E-05
                                      LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

20. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
IS 5.79999E-05 / STRENGTH FUNCTION 5.80005E-05 / LIES OUTSIDE LIMITS
1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

```
FILE   2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS   5.79999E-05
                      STRENGTH FUNCTION 5.80005E-05
                                      LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

21. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
IS 5.79999E-05 / STRENGTH FUNCTION 5.79992E-05 / LIES OUTSIDE LIMITS
1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

```
FILE   2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS   5.79999E-05
                      STRENGTH FUNCTION 5.79992E-05
                                      LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

22. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION
IS 5.79999E-05 / STRENGTH FUNCTION 5.80015E-05 / LIES OUTSIDE LIMITS
1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

```
FILE  2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.79999E-05
                      STRENGTH FUNCTION 5.80015E-05
                              LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

23. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION IS 5.79999E-05 / STRENGTH FUNCTION 5.79998E-05 / LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
        ENERGY =  5.50000E+03. STRENGTH FUNCTION IS  5.79999E-05
                      STRENGTH FUNCTION 5.79998E-05
                              LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04
```

24. Non-threshold reaction with Q value differing from PSYCHE's expectations
FILE 3 / SECTION 103 / THE CALCULATED Q 4.81983E+05 DISSAGREES WITH THE GIVEN Q 6.33056E+05 (0): Iffy Q

```
FILE  3
   SECTION 103
        THE CALCULATED Q  4.81983E+05 DISSAGREES WITH THE GIVEN Q  6.33056E+05
```

- fudge-4.0 Warnings:

   1. Missing a channel with a particular angular momenta combination
   resonances / resolved / MultiLevel_BreitWigner (Error # 0): missingResonanceChannel

   ```
   WARNING: Missing a channel with angular momenta combination L = 0, J = 0.0 and S = 0.0 for "capture"
   ```

   2. Potential scattering hasn't converged, you need more L's!
   resonances / resolved (Error # 1): potentialScatteringNotConverged

   ```
   WARNING: Potential scattering hasn't converged by L=0 at E=5500.0 eV, xs[0]/xs[0]=100.0% > 0.1%
   ```

   3. Cross section does not match sum of linked reaction cross sections
   crossSectionSum label 0: total (Error # 0): CS Sum.

   ```
   WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.20%
   ```

   4. Cross section does not match sum of linked reaction cross sections
   crossSectionSum label 1: (z,n) (Error # 0): CS Sum.

   ```
   WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.11%
   ```

- fudge-4.0 Errors:

   1. Calculated and tabulated Q values disagree.
   reaction label 31: n[multiplicity:'2'] + Br78 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -10772742.40940857 eV vs -1.06881e7 eV!
   ```

   2. Calculated and tabulated Q values disagree.
   reaction label 32: n[multiplicity:'3'] + Br77 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -19061448.19358826 eV vs -1.89807e7 eV!
```

3. Calculated and tabulated Q values disagree.
   reaction label 33: n + H1 + Se78 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -6416610.806060791 eV vs -6332140. eV!
```

4. Calculated and tabulated Q values disagree.
   reaction label 34: n + H2 + Se77 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -14689855.68930054 eV vs -1.45235e7 eV!
```

5. Calculated and tabulated Q values disagree.
   reaction label 35: n + H3 + Se76 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -15851483.55636597 eV vs -1.57614e7 eV!
```

6. Calculated and tabulated Q values disagree.
   reaction label 36: Br80 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 7807062.788986206 eV vs 7892390. eV!
```

7. Calculated and tabulated Q values disagree.
   reaction label 37: n + He4 + As75 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -5546232.15802002 eV vs -5457980. eV!
```

8. Calculated and tabulated Q values disagree.
   reaction label 39: H1 + Se79_s (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 546221.2555236816 eV vs 633056. eV!
```

9. Calculated and tabulated Q values disagree.
   reaction label 40: H2 + Se78_s (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -4192044.705123901 eV vs -4022020. eV!
```

10. Calculated and tabulated Q values disagree.
    reaction label 41: H3 + Se77_s (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -8432622.748687744 eV vs -8338360. eV!
```

11. Calculated and tabulated Q values disagree.
    reaction label 42: He3 + As77_s (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -9097047.643783569 eV vs -9010130. eV!
```

12. Calculated and tabulated Q values disagree.
    reaction label 43: He4 + As76_s (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 1782178.71472168 eV vs 1874810. eV!
```

- `njoy2012` Warnings:

1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

   ```
   ---message from conver---cannot do complete particle production for mt= 16
                          only mf4/mf5 provided
   ```

2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

   ```
   ---message from conver---cannot do complete particle production for mt= 17
                          only mf4/mf5 provided
   ```

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

   ```
   ---message from conver---cannot do complete particle production for mt= 22
                          only mf4/mf5 provided
   ```

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)

   ```
   ---message from conver---cannot do complete particle production for mt= 28
                          only mf4/mf5 provided
   ```

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)

   ```
   ---message from conver---cannot do complete particle production for mt= 32
                          only mf4/mf5 provided
   ```

6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (5): GROUPR/conver (0)

   ```
   ---message from conver---cannot do complete particle production for mt= 33
                          only mf4/mf5 provided
   ```

7. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended

to goad evaluators to improve things!
groupr...compute self-shielded group-averaged cross-sections (6): GROUPR/conver (0)

```
 ---message from conver---cannot do complete particle production for mt= 91
                         only mf4/mf5 provided
```